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USE OF TUMOR NECROSIS FACTOR (TNF) AS AN ADJUVANT;

IMMUNOLOGICAL RESPONSE

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Abstract: Tumor necrosis factors, alone or together with cytokines such as IL-1 or INF- gamma , are capable of serving as non-toxic vaccine adjuvants.

USE OF TUMOR NECROSIS FACTOR (TNF) AS AN ADJUVANT

_ _ _ _ -----? s photodynamic or phototherapy 19046 PHOTODYNAMIC 8768 PHOTOTHERAPY 27360 PHOTODYNAMIC OR PHOTOTHERAPY ? s immunologic(5n)adjuvant 205130 IMMUNOLOGIC 116000 ADJUVANT S2 526 IMMUNOLOGIC (5N) ADJUVANT ? s s1 and s2 27360 S1 526 S2 S3 1 S1 AND S2 ? t s3/3, k, ab/13/3,K,AB/1 (Item 1 from file: 340) DIALOG(R) File 340:CLAIMS(R)/US Patent (c) 2002 IFI/CLAIMS(R). All rts. reserv. Dialog Acc No: 10060546 IFI Acc No: 2002-0004053 IFI Acc No: 2002-0000935 Document Type: C CELLULAR OR ACELLULAR ORGANISM ERADICATION VIA PHOTODYNAMIC ACTIVATION OF A CELLULAR OR ACELLULAR ORGANISM SPECIFIC IMMUNOLOGICAL RESPONSE; IDENTIFYING A CELLULAR/ACELLULAR ORGANISM SITE ON LIVING BODY AND COMBINING ADMINISTRATION OF ADJUVANT WHICH INCREASES IMMUNE RESPONSE (BUILDS ANTIBODIES) AND PHOTODYNAMIC LIGHT CAUSING NECROSIS Inventors: Biel Merrill A (US) Assignee: Unassigned Or Assigned To Individual Assignee Code: 68000 Publication (No, Date), Applic (No, Date): US 20020004053 20020110 US 2001782841 20010214 Publication Kind: A1 Cont.-in-part Pub(No), Applic(No, Date): PENDING US 98139861 19980825 Priority Applic(No,Date): US 2001782841 20010214; US 98139861 19980825 Abstract: A method of eradicating cellular or acellular organisms of a

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living body by promoting a systemic immunologic activity specific to the cellular/acellular organisms including the steps identifying a cellular/acellular organism site of the living body; combining an administration of an immunologic adjuvant to said body, the immunologic adjuvant promoting a systemic increased level of molecular and cellular factors and cells necessary to effect a systemic immunologic response and an administration of a photodynamic light therapy proximate said cellular/acellular organism site, said photodynamic light therapy having a sufficient light dosage to cause cell necrosis of a cellular/acellular organism within the cellular/acellular organism site, said photodynamic cellular/acellular organism necrosis resulting in the release of necrosis-generated cellular/acellular organism antigens; and promoting and enhancing a systemic cellular/acellular organism-related immunologic response of said body as a result of an interaction between the molecular and cellular factors and cells and the necrosisgenerated cellular/acellular organism specific antigens, said systemic immunologic response yielding an increased level of cellular/acellular organism specific antibodies and other immunologic cellular/acellular organism specific products and cells specifically targeted to immunologically eradicate similar cellular/acellular organisms.

CELLULAR OR ACELLULAR ORGANISM ERADICATION VIA PHOTODYNAMIC ACTIVATION OF A CELLULAR OR ACELLULAR ORGANISM SPECIFIC IMMUNOLOGICAL RESPONSE...

...ON LIVING BODY AND COMBINING ADMINISTRATION OF ADJUVANT WHICH INCREASES IMMUNE RESPONSE (BUILDS ANTIBODIES) AND **PHOTODYNAMIC** LIGHT CAUSING NECROSIS

Abstract: ...identifying a cellular/acellular organism site of the living body; combining an administration of an immunologic adjuvant to said body, the immunologic adjuvant promoting a systemic increased level of molecular and cellular factors and cells necessary to effect a systemic immunologic response and an administration of a photodynamic light therapy proximate said cellular/acellular organism site, said photodynamic light therapy having a sufficient light dosage to cause cell necrosis of a cellular/acellular organism within the cellular/acellular organism site, said photodynamic cellular/acellular organism necrosis resulting in the release of necrosis-generated cellular/acellular organism antigens...

- Exemplary Claim: ...identifying a primary tumor tissue site of the living body; combining an administration of an immunologic adjuvant at a predetermined concentration to said body, said predetermined concentration being approximately a standard concentration for immunization procedures of said body, said administered immunologic adjuvant resulting in a systemic condition of heightened nonspecific enhanced immune system of the body, including...
- ...of nonspecific immune-related molecular and cellular factors and cells, and an administration of a **photodynamic** light therapy proximate said primary tumor tissue site, said **photodynamic** light therapy having a light wavelength and a sufficient light dosage to eradicate tumor cells...
- ...between the increased level of nonspecific immune-related molecular and cellular factors and cells and **photodynamic** light therapy released tumor cell specific antigens, said systemic immunologic response yielding increased levels of...
- Non-exemplary Claims: ...4. The method of claim 1 wherein the administration of the **immunologic adjuvant** is achieved via one or more of the group containing an intravenous injection, an injection...
- ...5. The method of claim 1 wherein the step of administering the **photodynamic** light therapy includes the step of administering a photosensitizing agent...
- ...7. The method of claim 1 wherein the immunologic adjuvant is DETOX...
- ...9. The method of claim 1 wherein the administration of the immunologic adjuvant precedes the administration of the photodynamic light therapy...
- ...10. The method of claim 1 wherein the administration of the **photodynamic** light therapy precedes the administration of the **immunologic adjuvant**.
- ...11. The method of claim 1 wherein the administration of the photodynamic light therapy and the administration of the immunologic adjuvant occur at least in part simultaneously ...
- ...12. The method of claim 1 wherein the administration of the immunologic adjuvant includes one or more separate administrations of the adjuvant to the body...

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- ...13. The method of claim 1 wherein the administration of the immunologic adjuvant includes administrations before and after the administration of the photodynamic light therapy...
- ...administering of an immune modulator to the body before, during, or after the administration of photodynamic light therapy...of: identifying an acellular organism site of the living body; combining an administration of an immunologic adjuvant to said body, said immunologic adjuvant promoting a systemic increased level of molecular and cellular factors and cells necessary to effect a systemic immunologic response and an administration of a photodynamic light therapy proximate said acellular organism site, said photodynamic light therapy having a sufficient light dosage to cause cell necrosis of an acellular organism within the acellular organism site, said photodynamic acellular organism necrosis resulting in the release of necrosis-generated acellular organism antigens; and promoting...
- ...17. The method of claim 16 wherein the administration of the immunologic adjuvant precedes the administration of the photodynamic light therapy...
- ...18. The method of claim 16 wherein the administration of the **photodynamic** light therapy precedes the administration of the **immunologic adjuvant**.
- ...19. The method of claim 16 wherein the administration of the photodynamic light therapy and the administration of the immunologic adjuvant occur at least in part simultaneously
- ...22. The method of claim 16 wherein the administration of the immunologic adjuvant is achieved via one or more of the group containing an intravenous injection, an injection...
- ...23. The method of claim 16 wherein the step of administering the **photodynamic** light therapy includes the step of administering a photosensitizing agent...
- ...25. The method of claim 16 wherein the immunologic adjuvant is DETOX26. The method of claim 16 further comprising the step of: administering the immunologic adjuvant to the body for a period of time following the photodynamic light therapy...
- ... The method of claim 16 further comprising the step of: repeating the administrations of the **photodynamic** light therapy...
- ... The method of claim 16 further comprising the step of: repeating the administrations of the immunologic adjuvant.
- ...administering of an immune modulator to the body before, during, or after the administration of **photodynamic** light therapy...
- ...of: identifying a cellular organism site of the living body; combining an administration of an immunologic adjuvant to said body, said immunologic adjuvant promoting a systemic increased level of molecular and cellular factors and cells necessary to effect a systemic immunologic response and an administration of a photodynamic light therapy proximate said cellular organism site, said photodynamic light therapy having a sufficient light dosage to cause cell necrosis of a cellular organism within the cellular organism site, said photodynamic cellular organism necrosis resulting in the release of necrosis-generated cellular organism

antigens; and promoting...

- ...34. The method of claim 33, wherein the administration of the immunologic adjuvant precedes the administration of the photodynamic light therapy...
- ...35. The method of claim 33, wherein the administration of the **photodynamic** light therapy precedes the administration of the **immunologic adjuvant**.

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...36. The method of claim 33, wherein the administration of the photodynamic light therapy and the administration of the immunologic adjuvant occur at least in part simultaneously

...37. The method of claim 33 wherein the administration of the immunologic adjuvant is achieved via one or more of the group containing an intravenous injection, an injection...39. The method of claim 33 further comprising the step of: administering the immunologic adjuvant to the body for a period of time following the photodynamic light therapy...

- ... The method of claim 33 further comprising the step of: repeating the administrations of the **photodynamic** light therapy...
- ... The method of claim 33 further comprising the step of: repeating the administrations of the immunologic adjuvant.

...administering of an immune modulator to the body before, during, or after the administration of **photodynamic** light therapy

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